Nova Scotia
Department of
Agriculture and Marketing

RP-90-125
Agdex 410.821 03

Dairy Farms
Five Year Summary

1985 - 1989

1985-1989

NOVA SCOTIA DAIRY FARM

BUSINESS SUMMARY REPORT

PREPARED BY:

ALAN C. GRANT, P.AG.

SUPERVISOR, FARM BUSINESS MANAGEMENT

AND

RONDA BELLEFONTAINE

FARM BUSINESS MANAGEMENT TECHNICIAN

FARM BUSINESS MANAGEMENT SECTION

NOVA SCOTIA DEPARTMENT OF AGRICULTURE AND MARKETING

TABLE OF CONTENTS

	PAGE
FOREWORD	i
SECTION A - SUMMARY	1
SECTION B - PER FARM ANALYSIS	4
SECTION C - PER COW ANALYSIS	7
SECTION D - PER HECTOLITRE ANALYSIS	10

FOREWORD

This report provides a summary of the business performance of Nova Scotia dairy farms over a five year period, 1985-1989 inclusive. Data used in the preparation of this summary was obtained from the Nova Scotia Dairy Farm Business Summaries prepared in each of the five years included in this report.

As noted in the Dairy Farm Business Summaries, the farms used were not selected on a random sample basis, but rather volunteered their information. Hence, care should be exercised in the interpretation and use of the results shown in this summary.

The main purpose of this summary is to provide basic information on the dairy industry, at the farm level, in Nova Scotia over a five year period. Trends in incomes, costs, net returns, efficiency and management factors are outlined.

The co-operation of the dairy producers whose business information has been used to prepare this summary is gratefully acknowledged. Thanks are also extended to Tracey Mitchell, who did the secretarial work for this report.

The authors accept full responsibility for any errors which may appear in the final report.

Alan C. Grant, P.Ag.
Supervisor, Farm Business Management

Ronda Bellefontaine
Farm Business Management Technician

SEPTEMBER 1990

SECTION A

SUMMARY

SUMMARY

This report provides information on trends that have occurred at the farm level in the Dairy Industry over the five year period, 1985-1989 inclusive. As noted earlier, the farms used to provide the basic data were not selected on a random sample basis. However, even with this noted limitation, the information contained in this summary can be used with care to provide useful trend data regarding the dairy industry in Nova Scotia.

The material is presented in the following manner - a brief summary of ratios, cost and return data, and management factors on a per farm, per cow and per hectolitre basis. The format used for presentation of information is similar to that used in the annual Dairy Farm Business Summaries.

In reviewing information contained in Table A-1, a number of observations can be made. Gross Farm Income has increased in each of the five years with an overall increase of some 15 percent over the five year period. At the same time, costs have increased 12 percent over this period. Net Farm Income has increased by 30 percent over the five year period, averaging an increase of 6 percent a year. In 1989, Net Farm Income actually decreased by 10 percent.

Production per cow has shown an increase over the five years, with the change over the period being 10.1 percent. Milk sold per man equivalent has increased by 12.6 percent over the period, with a slight decrease occurring in the last two years.

In terms of prices received from milk, this figure has also changed over the period, from an average price of $49.83 per hectolitre in 1985 to $55.14 in 1989. This represents an increase in percentage terms, of 11 percent. While returns have been increasing, costs have been on the rise as well. The cost of producing a hectolitre of milk averaged $50.32 in 1985, while in 1989 this figure was $56.72 - for a percentage change of 13 percent. The net return to the farmer was negative in 1989 - that is, the gross return was less than the cost. In 1989 the net return was $-1.58 per hectolitre.

The largest individual component of cost in producing milk is purchased dairy ration. On a per cow basis, this expense has increased from $760. in 1985 to $830. in 1989, for a percentage increase of 9 percent. On a per hectolitre of milk sold basis, the cost of feed decreased by $0.11 from $13.48 in 1985 to $13.37 in 1989.

Investment per cow has increased gradually over the five year period, with the percentage change between 1985 and 1989 being 41 percent.

Return to total invested capital improved during the three year period, 1985-1987, going from 8.7 percent in 1985 to 11.5 percent in 1987. In 1988, it decreased slightly to 9.8 percent and decreased slightly again in 1989 to 8.1 percent.

Capital turnover has remained relatively steady over the five year period, ranging from 1.5 in 1985 to 1.7 in 1989.

TABLE A-1: SUMMARY

Item	1985	1986	1987	1988	1989
Gross Farm Income	213631	225127	239440	240313	244778
Total Farm Expenses	186869	189725	196115	201614	209886
Net Farm Income	26762	35403	43325	38699	34892
Labour & Management Income	14002	18306	25505	19156	12585
# of Cows/Farm	64	64	63	61	62
Production/Cow (L)	5640	5807	6127	6200	6207
Cows/Man Equivalent	23	25	24	23	23
Milk Sold/Man Equiv. (HL)	1274	1442	1442	1436	1434
Receipts From Milk/HL	49.83	51.59	53.54	53.99	55.14
Cost of Producing Milk/HL	50.32	51.10	51.39	53.53	56.72
Net Return/HL	-0.49	0.50	2.15	0.46	-1.58
Variable Cost as % of Total Cost	67	64	62	61	59
Fixed Cost as % of Total Cost	20	21	23	24	24
Opportunity Cost as % of Total Cost	13	15	15	16	16
Purchased Feed/Cow ($)	760	764	711	776	830
Purchased Feed/Cow (Kg)	2861	2956	2863	2901	2895
Purchased Feed Cost/ HL Milk ($)	13.48	13.16	11.60	12.52	13.37
Kg. Purchased Feed/HL Milk	50.73	50.90	46.74	46.80	46.64
Purchased Feed Cost as % of Milk Sold (%)	27.1	25.5	21.7	23.2	24.3
Investment/Cow ($)	4920	5449	5902	6545	6913
Return on Investment (%)	8.7	9.8	11.5	9.8	8.1
Capital Turnover (Yrs)	1.5	1.6	1.6	1.7	1.7

SECTION B

PER FARM ANALYSIS

INCOME

Total Farm Receipts increased from an average of $210,728. in 1985 to $243,008. in 1989, for an overall increase of 15 percent over the five year period.

Income from milk and milk subsidies accounted for 87 percent of Total Farm Receipts in 1989 up marginally from 86 percent in 1985.

TABLE B-1: INCOME

Item	1985	1986	1987	1988	1989
Milk Sales	173997	186722	199573	197026	204054
Milk Subsidy	6503	6649	7293	7058	7318
Livestock Sales	15266	15193	18181	19602	17327
Crop Sales	2935	1905	2196	2645	2399
Miscellaneous	12028	11786	13816	11889	11911
TOTAL FARM RECEIPTS	210728	221624	241059	238220	243008

EXPENSES

Expenses on a per farm basis increased from an average of $165,476. in 1985 to $181,663. in 1989. This represents a change of some 9.8 percent in Cash Expenses over the five year period. Purchased dairy feed, the largest single cost item accounted for 28 percent of Cash Expenses in 1989.

TABLE B-2: EXPENSES

Item	1985	1986	1987	1988	1989
Dairy Feed	48840	49169	44818	47323	51274
Livestock Purchased	4858	4150	3722	4122	4745
Milk Hauling	6069	6697	7191	7153	7594
Crop Expenses	11428	11160	12361	12986	12692
Tractor & Machinery	12541	11356	12356	11339	12252
Truck & Auto	3276	2728	2911	3890	3471
Interest	17059	17861	19046	20431	21300
Labour	17648	17019	18907	20299	20514
Taxes & Insurance	3903	4559	4673	4747	5049
Milk Marketing Costs	10049	11742	12545	9200	6675
Dairy Supplies	4187	4793	5000	5550	5992
Vet & Drugs	2136	2201	2499	2876	3315
Breeding	2432	2507	2521	2619	3326
Building & Fence Repairs	4034	4181	4149	5244	5645
Utilities	5506	4768	4663	4868	5156
Custom Work }	-	-	4592	3710	5389
Rentals & Leases } *	-	-	2548	2642	2353
Miscellaneous }	11509	11370	5894	5339	4919
TOTAL CASH EXPENSES	165476	166261	170898	174337	181663

* Prior to 1987, custom work, as well as rentals & leases, were included in miscellaneous expense.

INCOME SUMMARY

In reviewing different levels of income, it was noted that despite an overall increase over the five (5) year period, income at all levels decreased between 1987 and 1988, and between 1988 and 1989. Net Cash Income has increased by 36 percent over the period from $45,251. in 1985 to $61,344. in 1989. Net Farm Income has also increased from $26,762. in 1985 to $34,892. in 1989, an increase of 30 percent.

Although Labour and Management Income saw increases during the 1985 to 1987 period, decreases between 1987 and 1989 have resulted in an overall decrease of 10 percent during this five year period.

TABLE B-3: INCOME SUMMARY

Item	1985	1986	1987	1988	1989
Total Farm Receipts	210728	221624	241059	238220	243008
Total Cash Expenses	165476	166261	170898	174337	181663
NET CASH INCOME	45251	55363	70161	63882	61344
Plus: Inventory Change	2903	3503	-1619	2094	1770
Less: Depreciation	21393	23464	25217	27277	28223
NET FARM INCOME	26762	35403	43325	38699	34892
Less: Value of Unpaid Family Labour	616	2493	2437	2556	3195
Interest on Net Worth @ 10%	12144	14604	15383	16988	19112
LABOUR & MANAGEMENT INCOME	14002	18306	25505	19156	12585

SECTION C

PER COW ANALYSIS

Nova Scotia

Department of Agriculture and Marketing

Agricultural Development Division

Farm Business Management Section

PO Box 550
Truro, Nova Scotia
Canada B2N 5E3

Our file no:

September 21, 1990

RECEIVED
SEP 27
N.S. LEGISLATIVE LIBRARY

N.S. Legislative Library
P.O. Box 396
Halifax, N.S.
B3J 2P8

Dear Ms. Cromwell:

We have recently completed an up-date of our Five Year Dairy Farm Business Summary and I am attaching a copy for your information.

In compiling the data for this summary, we have used information found in the 1985-1989 Nova Scotia Dairy Farm Business Summaries.

In putting together this summary, it is intended to show trends which have occured over the past five (5) years. It is noted that Gross Farm Income for 1989 is above the same figure for 1988. Costs have continued to increase. Net Farm Income for 1989 was below 1988.

Milk production (i.e. milk sold per cow) has increased 10% over the period. Price received per hectolitre has increased by 11% over the period. Purchased dairy feed, the largest single cost item, has increased over the period by 9% (in nominal dollar terms), on a per cow basis. Feed cost per hectolitre of milk sold, however, has decreased by 1%.

While we do not plan a large distribution of this summary, I thought you might find this information useful. If you have any questions or comments, please let me know.

Yours very truly,

Alan C. Grant, P.Ag.
Supervisor, Farm Business Management

ACG/tdm
Enc.

INCOME

When figures are calculated on a per cow basis, Total Farm Receipts have increased by 20 percent over the five (5) year period - from $3,281. in 1985 to $3,935. in 1989.

TABLE C-1: INCOME PER COW

Item	1985	1986	1987	1988	1989
Milk Sales	2709	2893	3164	3231	3304
Milk Subsidy	101	103	116	116	118
Livestock Sales	238	236	288	322	281
Crop Sales	46	30	35	43	39
Miscellaneous	187	183	219	195	193
TOTAL FARM RECEIPTS	3281	3445	3822	3907	3935

EXPENSES

Over the five (5) year period, Cash Expenses have increased from $2,576. per cow in 1985 to $2,941. in 1989 - a change of $365. per cow or some 14 percent.

TABLE C-2: EXPENSES PER COW

Item	1985	1986	1987	1988	1989
Dairy Feed	760	764	711	776	830
Livestock Purchased	76	65	59	68	77
Milk Hauling	94	104	114	117	123
Crop Expenses	178	173	196	213	205
Tractor & Machinery	195	177	196	186	198
Truck & Auto	51	42	,6	64	56
Interest	266	278	302	335	345
Labour	275	265	300	333	332
Taxes & Insurance	61	71	74	78	82
Milk Marketing Costs	156	183	199	151	108
Dairy Supplies	65	75	79	91	97
Vet & Drugs	33	34	40	47	54
Breeding	38	39	40	43	54
Building & Fence Repairs	63	65	74	86	91
Utilities	86	74	74	80	93
Custom Work }	-	-	73	61	87
Rentals & Leases } *	-	-	40	43	38
Miscellaneous }	179	177	93	88	80
TOTAL CASH EXPENSES	2576	2585	2710	2860	2941

* Prior to 1987, custom work and rentals & leases were included with miscellaneous expenses.

INCOME SUMMARY

Net Cash Income per cow decreased between 1987 and 1988, and again between 1988 and 1989. However, overall net cash income on a per cow basis has increased $289. or by 41 percent over the five year period. Net Farm Income had increased by $148. per cow between 1985 and 1989.

An overall decrease in Labour and Management Income occurred over the five (5) year period. The 1989 per cow figure shows a decrease of 35 percent over the 1988 level, and a decrease of 6 percent over the five year period.

TABLE C-3: INCOME SUMMARY PER COW

Item	1985	1986	1987	1988	1989
Total Farm Receipts	3281	3445	3822	3907	3935
Total Cash Expenses	2576	2585	2710	2860	2941
NET CASH INCOME	705	861	1113	1048	994
Plus: Inventory Change	45	54	-26	34	29
Less: Depreciation	333	365	400	447	457
NET FARM INCOME	417	550	687	635	565
Less: Value of Unpaid Family Labour	10	39	39	42	52
Interest on Net Worth @ 10%	189	227	244	279	309
LABOUR & MANAGEMENT INCOME	218	285	404	314	204

SECTION D

PER 100 LITRES ANALYSIS

INCOME

Analysis of Total Farm Receipts on a per hectolitre of milk sold basis indicates that Farm Receipts have increased by $5.22 per hectolitre over the period. This translates to a change of 9 percent.

TABLE D-1: INCOME PER HECTOLITRE

Item	1985	1986	1987	1988	1989
Milk Sales	48.03	49.81	51.66	52.13	53.23
Milk Subsidy	1.80	1.78	1.89	1.87	1.91
Livestock Sales	4.21	4.07	4.71	5.19	4.52
Crop Sales	0.81	0.51	0.57	0.70	0.63
Miscellaneous	3.32	3.16	3.58	3.15	3.11
TOTAL FARM RECEIPTS	58.17	59.33	62.39	63.02	63.39

EXPENSES

Cash Expenses increased by $1.71 on a per hectolitre of milk sold basis over the five (5) year period. In percentage terms, this represents a change of approximately 3.7 percent.

TABLE D-2: EXPENSES PER HECTOLITRE

Item	1985	1986	1987	1988	1989
Dairy Feed	13.48	13.16	11.60	12.52	13.37
Livestock Purchased	1.34	1.11	0.96	1.09	1.24
Milk Hauling	1.68	1.79	1.86	1.89	1.98
Crop Expenses	3.15	2.99	3.20	3.44	3.31
Tractor & Machinery	3.46	3.04	3.20	3.00	3.20
Truck & Auto	0.90	0.73	0.75	1.03	0.91
Interest	4.71	4.78	4.93	5.41	5.56
Labour	4.87	4.56	4.89	5.37	5.35
Taxes & Insurance	1.08	1.22	1.21	1.26	1.32
Milk Marketing Costs	2.77	3.14	3.25	2.43	1.74
Dairy Supplies	1.16	1.28	1.29	1.47	1.56
Vet & Drugs	0.59	0.59	0.65	0.76	0.86
Breeding	0.67	0.67	0.65	0.69	0.87
Building & Fence Repairs	1.11	1.12	1.20	1.39	1.47
Utilities	1.52	1.28	1.21	1.29	1.34
Custom Work }	-	-	1.19	0.98	1.41
Rentals & Leases } *	-	-	0.66	0.70	0.61
Miscellaneous }	3.18	3.04	1.53	1.41	1.28
TOTAL CASH EXPENSES	45.68	44.51	44.23	46.12	47.39

* Prior to 1987 custom work and rentals & leases were included with miscellaneous expenses.

INCOME SUMMARY

An analysis of income on a per hectolitre of milk sold basis reveals Net Cash Income increased by $3.51 over the five (5) year period, despite decreases in 1988 and 1989. Similarly, Net Farm Income decreased in 1988 and 1989, but overall it increased $1.71 per hectolitre over the five year period.

Labour and Management Income shows an overall decrease of $0.59 per hectolitre over the period.

TABLE D-3: INCOME SUMMARY PER HECTOLITRE

Item	1985	1986	1987	1988	1989
Total Farm Receipts	58.17	59.33	62.39	63.02	63.39
Total Cash Expenses	45.18	44.51	44.23	46.12	47.39
NET CASH INCOME	12.49	14.82	18.16	16.90	16.00
Plus: Inventory Change	0.80	0.94	-0.42	0.55	0.46
Less: Depreciation	5.91	6.28	6.53	7.22	7.36
NET FARM INCOME	7.39	9.48	11.21	10.24	9.10
Less: Value of Unpaid Family Labour	0.17	0.67	0.63	0.68	0.84
Interest on Net Worth @ 10%	3.35	3.91	3.98	4.49	4.98
LABOUR & MANAGEMENT INCOME	3.87	4.90	6.60	5.07	3.28